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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/924,379	08/08/2001	Naoto Uyama	10099.204-US	2145

25908 7590 07/16/2003

NOVOZYMES NORTH AMERICA, INC.
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NEW YORK, NY 10110

EXAMINER

HAMLIN, DERRICK G

ART UNIT	PAPER NUMBER
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1751

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DATE MAILED: 07/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/924,379

Applicant(s)

UYAMA ET AL.

Examiner

Derrick G. Hamlin

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

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DETAILED ACTION

Information Disclosure Statement

The acknowledges that an information disclosure statement filed 12/6/2001 and the references have been received. However, the information disclosure statement filed, does not appear in the case and should be resubmitted. Since the information disclosure statement is not in the file, the information referred to therein has not been considered.

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Evaluations of level of ordinary skill in the art requires consideration of factors such as various prior art approaches employed, types of problems encountered in the art, rapidity with which innovations are made, sophistication of technology involved, educational background of those actively working in the field, commercial success, failure of others, and the inventor's educational level.

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The "person having ordinary skill" in this art has the capability of understanding the scientific and engineering principles applicable to the claimed invention. The references of record in this case reasonably reflect this level of skill.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baeck et al. (5,837,010).

Claim 1 of the invention claims a method of improving the whiteness of a fabric and preventing the dinginess buildup on a fabric by preventing redeposition of removed soils in solution from reattaching to the fabric by contacting the fabric to be cleaned with a composition comprising the following: (a) a mutated enzyme D96L derived from *Humicola lanuginosa* in an amount of 50 to 7500 Lu per liter of aqueous solution; (b) 10% to 80% of a builder; (c) 0.1% to 60% of a surfactant; and (d) an additional enzyme selected from the group consisting of xylanase, protease, amylase peroxidase, cellulase, and mixtures thereof. Also suitable are cutinases [EC 3.1.1.50], which can be considered as a special kind of lipase, namely lipases which do not require interfacial activation. The addition of cutinases to detergent compositions have been described in e.g. WO-A-88/09367 (Genencor). The lipases and/or cutinases are normally incorporated in the detergent composition at levels from 0.0001% to 2% of active enzyme by weight of the detergent composition. (col. 11, lines 49-56) Furthermore, the reference teaches peroxidase enzymes are used in combination with oxygen sources, e.g. percarbonate, perborate, persulfate, hydrogen peroxide, etc. They are used for "solution bleaching", i.e. to prevent transfer of dyes or pigments removed from

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substrates during wash operations to other substrates in the wash solution (col. 11, lines 56-68).

With respect to claims 5-7, the reference fails to teach that the fabric is a specific blend or cleaned at a specific temperature. Although, the reference fails to teach that the fabric is a specific blend or cleaned at a specific temperature, it is well known in the art that a conventional washing machine may be used with various fabrics and that hot, cold or warm water may be used.

With respect to claim 4, the reference does not teach the source of the cutinases, nor does it teach the why the source is patentable. Even if the source of the cutinase is relevant, the reference does teach the specific instantly claimed cutinase by number and one of ordinary skill in the art would reasonably expect the specific instantly claimed cutinase to have been derived from the same source.

With respect to claims 1 and 11 and all dependant claims, the reference does not teach that the composition is specifically to prevent back staining of a fabric or its use in stone washing. Although, the reference does not teach that the composition specifically prevents back staining, or its use in stone washing, it does teach that it is used to prevent redeposition of removed soils in solution from reattaching to the fabric and that it is also used with a peroxidase enzyme to prevent transfer of dyes or pigments removed from substrates during wash operations to other substrates in the wash solution. There is a reasonable expectation of success that the mixture of the reference would prevent back staining as it prevents the depositing of dyes and dirt.

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It would therefore have been obvious to one of ordinary skill in the art at the time the invention was made to apply the instant method comprising contacting a fabric with a lipolytic enzyme, to a process for stone washing a fabric or to prevent back staining, as the redepositing of the dye or soil not desired.

In view of the forgoing, the above claims have failed to be patently distinguishable over prior art.

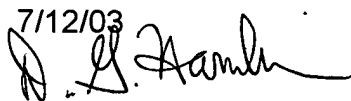
The remaining references listed on form(s) 892 and 1449 have been reviewed by the examiner and are considered to be cumulative to or less material than the prior art references relied upon in the rejection above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick G. Hamlin whose telephone number is (703) 305-0590. The examiner can normally be reached on Monday-Thursday and alternating Fridays from 8:30 AM - 5:00 PM.

If reasonable attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dr. Yogendra Gupta, can be reached on (703) 308-4708. The fax phone number for this Group is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 308-0661.

Derrick G. Hamlin

7/12/03




YOGENDRA N. GUPTA
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